March 24, 1950.

Mr. G. O. Carrington, Dept. Microbiology, School of Medicine, Western Reserve University, Cleveland, Ohio.

Dear Carrington:

I have your letter of the 19th inquiring about a purineless strain which we received in November 1948, from Dr. Luria. We listed this stock as W-590 in our records.

Unfortunately, I have not been able to grow out W-590 from the stock vial in which it had been inoculated about a year ago, and I cannot recall having sent the strain anywhere else. I must admit that our interest in W-590 was rather limited, so that no special attention was given it. However, I am surprised at its inviability. I will make every additional attempt possible to recover the strain, but can offer you no hoped.

Mrs. Lederberg tells me that she conducted a few preliminary tests on the growth requirements of W-590. According to her notes, the following results were obtained:

Supplement	Growth
guanine	_
uracil	-
xanthine	+
guanine + uracil	+

We were impressed by the possibility of some sort of transamination which would convert guanine to xanthine, but did not carry the matter any further, especially since Dr. Luria had mentioned your interest in this aspect. The guanine and uracil in the above test had been autoclaved together, so there might conceivably have been a chemical rather than a biological transformation.

I will let you know if we have any better luck at resuscitating W-590, but as I say, it is rather doubtful. Please give J.O. my best regards,

Sincerely,

Joshua Lederberg